Approved
11/2/18

Connecticut Children's
MEDICAL CENTER

November 2, 2018

Susan Newton, RN
Supervising Nurse Consultant
Facility Licensing and Investigation Section
State of Connecticut
Department of Public Health
410 Capitol Avenue – MS#12HSR
PO Box 340308
Hartford, CT 06134

Dear Ms. Newton,

Enclosed is Connecticut Children's Medical Center's response to your letter dated August 30, 2018 regarding the unannounced visits made to Connecticut Children's Medical Center concluding on September 21, 2018.

Please feel free to contact me at (860) 837-5525 if you have any questions or concerns.

Sincerely,

Amy Groschel

Amy Z. Groschel BSN, RN
Regulatory Manager

Connecticut Children's Medical Center
DPH Dates of Visit: August 30 & September 21, 2018

The following violation(s) of the Regulations of Connecticut State Agencies and/or Connecticut General Statutes were identified.

The following is a violation of the Regulations of Connecticut State Agencies Section 19-13-D3 (b) Administration (2) and/or (c) Medical Staff (2) and/or (e) Nursing Services (1).

1. Based on clinical record review and interview for 1 (P#1) of 3 patients treated during a cardio-pulmonary emergency the hospital failed to ensure the patient received the appropriate dose of an emergency medication. The findings included:

FINDING	PLAN OF CORRECTION	RESPONSIBLE PARTY AUDIT PROCESS	TIMELINE
P#1 (pediatric) arrived in the Emergency Department (ED) on 6/29/18 via Emergency Medical Services (EMS) after reported seizure activity at home. P#1's history included Down syndrome and post Atria Ventral (AV) canal defect repair in 2008. Upon arrival P#1 was noted to be actively seizing and immediately became unresponsive and not breathing with a heart rate less than 40. Full resuscitation was initiated including cardiopulmonary resuscitation (CPR), advance airway insertion and epinephrine (adrenalin) administration via intraosseous route (IO) access due to the inability to establish a peripheral intravenous (IV) line. P#1 was resuscitated for 40 minutes and received a total of 7 doses of epinephrine without return of circulation. Telemetry monitor identified no shockable rhythm, CPR was discontinued and P#1	1. Emergency Department leadership will develop a medical alert pager group within the internal paging network. This pager group will include ED leadership, Bed Manager, Respiratory Therapy, Radiology, Security and Clinical Social work. 2. Emergency Department nurse educator will update and place identifying labels on reference notebooks utilized in the Trauma Room	Emergency Department Nursing Leadership *Medical Alert Pages will be reviewed monthly and added to the ED Collaborative Meeting to briefly discuss each episode Emergency Department Education Specialist *All appropriate labels added to reference binders. Presence of binder added to the daily code cart check.	Completed October 15, 2018 Completed August 21, 2018

expired. According to dosage information identified in the Hospital's Emergency Department reference card, based on P#1's weight of 46 kilograms, P#1 should have received 0.46 mg of Epinephrine with a calculated dose of 4.6ml. However according to medical record documentation P#1 received 0.46ml of Epinephrine per dose instead of 4.6ml. Facility documentation indicated during review of the code it was discovered that the calculated dose of epinephrine was incorrect and P#1 received under dosing of the epinephrine. **According to the Medical Examiners (ME) report dated 6/30/18 final anatomic diagnosis included (1) coronary artery vasculitis, acute, subacute and remote myocardial infarction, recent seizure activity, pulmonary congestion and edema (2) cardiomegaly and dilation and (3) chronic bronchitis. Cause of death was identified and coronary artery vasculitis with myocardial infarction and manner of death was identified as natural.** **During an Interview with Registered Nurse (RN) #2 on 9/21/18 at 12:00PM he/she indicated when the code was initiated RN #3 asked RN #2 to be the second medication nurse. RN#3 was at the emergency mediation box and asked for the code book which identified the appropriate dose of emergency medications based on weight. There were usually two code books in the room however at**	3. Emergency Department nurse educator will develop focused epinephrine administration education. 4. Simulation Medical Director will develop monthly unannounced code blue simulations in the Emergency Department for all ED staff. 5. Implementation of visual indicators for staff to easily identify their position, by role during a resuscitation in the trauma room	Emergency Department Nursing Leadership *100% completion of nurse re-education achieved. Evaluation of this education will be conducted during the mock codes which have been implemented on a monthly basis. The mock codes are reviewed monthly at ED Collaborative. Simulation Medical Director *Simulation debrief will be added to the standing agenda and presented for review and discussion at the monthly ED Collaborative Meeting (held the 4th Tuesday of each month) Trauma Nurse Coordinator	Completed August 21, 2018 Completed November 9, 2018 Completed September 10, 2018

the time of the code the books could not be located therefore the Emergency Department (ED) pocket reference card, was used as backup. RN#2 indicated the verification that the code books are present in the room is done every shift however in this case the room had been used recently for a code and the contents had not been verified. According to RN#2 he/she did a double check on the epinephrine dose and indicated he/she had calculated 4.6 ml and RN #3 had calculated 0.46ml. RN#2 and RN#3 asked RN #1 who was at the bedside, to verify the dose and he/she indicated 4.6ml seemed to be too much although he/she was not positive. Upon surveyor inquiry RN#2 indicated the lesser dose of 0.46ml had been administered. During an interview with RN#3 on 9/21/18 at 11:00 AM he/she indicated once P#1's weight was identified he/she started preparing medications including epinephrine. RN#3 indicated RN #2 was assisting in the medication verification and could not find the 2 code books in the room therefore they used the ED pocket card, which identified 2 concentrations of epinephrine. RN#1 was asked to verify the dose at which time the dosage was still uncertain RN#2 indicated he/she asked MD#1 to clarify the dose and MD#1 called out the dose and milligrams and/or milliliters was not clarified. RN#3 indicated he/she drew up 0.46ml and should have drawn up 4.6ml			

During interview with Medical Doctor (MD) #1 on 9/21/18 at 10:00AM, MD #1 indicated he/she could not determine the outcome would have been different had P#1 received the higher dose epinephrine however the MD findings suggested higher dose of epinephrine would not have made a difference in the outcome. Hospital Code Blue-Medical Emergency Management policy indicated the credentialed practitioner who orders medication and the Registered Nurses (RN) who administers the medications during the resuscitation will review the Resuscitation Code Sheet (Code Cart Notebook) for accuracy of medications administered.			